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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/718,643

11/24/2003

Hiroaki Yasuda

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EXAMINER

HANNAHER, CONSTANTINE

ART UNIT

PAPER NUMBER

2884

MAIL DATE

DELIVERY MODE

05/08/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/718,643

Applicant(s)

YASUDA, HIROAKI

Examiner

Constantine Hannaher

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 9-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 20070330, 20070208.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on March 19, 2007 has been entered.

### **Information Disclosure Statement**

2. The statement as specified in 37 CFR 1.97(e) which accompanied the information disclosure statement filed February 8, 2007 was not valid at least because of the inclusion of US 5596202 A.

### **Claim Objections**

3. Claim 11 establishes a second reflection layer and a fifth wavelength range prior to the recitations in claim 12 of a first reflection layer and a fourth wavelength range.

### **Claim Rejections - 35 USC § 112**

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 9-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not describe arrangement of the filter device between the phosphor layer and the light source. The specification

does not enable the detection of emission light when the optical path between the source of excitation light and the phosphor layer is substantially not transparent to the excitation light. Also, as the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility for the reasons set forth below, one skilled in the art clearly would not know how to use the claimed invention. The specification does not describe an "overlap" between a third wavelength range and the wavelength range of the excitation light (since as recited by claim 9 and made plain by FIG. 3 the wavelength range of the emission light must pass the filter device). The specification does not describe the relation of the third wavelength range and the wavelength range of the excitation light as one in which the third range "borders" the second range (since as recited by claim 9 and made plain by FIG. 3 the wavelength range of the emission light must pass the filter device).

**Claim Rejections - 35 USC § 101**

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 9-20 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a specific and substantial asserted utility or a well established utility.

The specification does not set forth a specific and substantial utility for a device comprising a light source, a filter device not transparent to the light source, a phosphor layer, and a detector. To the extent that transmission of the excitation light from the source to the phosphor layer is insubstantial, no emission light is excited in the phosphor layer and no emission light is detected. In the absence of a detection of emission light, acquisition of any latent image information which might

be contained in the phosphor layer is prevented. No utility for a device of the type recited in which excitation is prevented by arrangement of the filter device is "well established."

**Claim Rejections - 35 USC § 103**

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell *et al.* (US 20030042445A1) in view of one of Struye *et al.* (US006583434B2) and Van de Bergh (US005905014A).

Mitchell *et al.* is available to the examiner under 35 U.S.C. 102(e) even subsequent to the perfection of the claim to foreign priority by the submission of the translation of the priority document on December 7, 2006.

With respect to independent claim 9, Mitchell *et al.* discloses a device (FIG. 6A) for acquiring latent image information in a phosphor layer (paragraph [0047]) comprising a light source 42 (paragraph [0061]), a detector 38 (paragraph [0083]), and a filter device 44 (paragraph [0084]). The light source, detector, and filter device of Mitchell *et al.* are all for the recited purposes, see paragraph [0062], last two sentences, regarding the transparency and lack of transparency of filter device 44 in the device of FIG. 6A. The filter device 44 of Mitchell *et al.* is fairly characterized as an absorption filter (paragraph [0062]). Thus, the sole difference between the scope and content of Mitchell *et al.* and the claim is that Mitchell *et al.* does not identify the construction of "a filter 44" (paragraph [0084]) as comprising at least two elements. As pointed out in the Advisory Action mailed August

28, 2006, the interchangeability of multiple filters for a single filter is recognized in the art (see column 9, lines 38-65 of Struye *et al.* and column 16, lines 19-35 of Van de Bergh). Because an express suggestion to substitute one known equivalent for another is not required (MPEP § 2144.06) it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the filter device 44 of Mitchell *et al.* such that it comprised at least two absorption filter elements joined to one another.

With respect to dependent claims 10-15 and 18, in view of the “glass filters with multilayer coatings” and “colored glass filters which may also be coated” of Mitchell *et al.* and the extensive knowledge of “filter types and spectral transmittance” available as described by Struye *et al.* and Van de Bergh, the specific transparency and non-transparency of individual filter elements in the filter device 44 of Mitchell *et al.* is a choice within the ordinary skill in the art. Multilayer coatings constitute a reflection layer.

With respect to dependent claims 16 and 19, the transmission of the filter device 44 of Mitchell *et al.* at wavelengths in the first wavelength range is at a degree within the claimed range (paragraph [0062]).

With respect to dependent claims 17 and 20, the transmission of the filter device 44 of Mitchell *et al.* at wavelengths in the second and third wavelength ranges is at a degree within the claimed range (paragraph [0062]).

## **Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Constantine Hannaher whose telephone number is (571) 272-2437. The examiner can normally be reached on Monday-Friday with flexible hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 Constantine Hannaher  
Primary Examiner  
Art Unit 2884

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